INSTRUCTIONS

CG SERIES ELECTRIC COUNTER GRIDDLES

MODELS

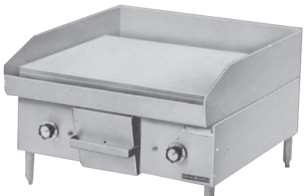
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CG41	ML-CG41208S001, CG41240S001, CG41480S001
CG50	ML-114582BN, BV, CC
CG55	ML-CG55208S001, CG55240S001, CG55480S001
CG58	ML-CG58208S001, CG58240S001, CG58480S001
CG59	ML-CG59208S001, CG59240S001, CG59480S001

HOBART CORPORATION
701 S. RIDGE AVENUE
TROY, OHIO 45374-0001

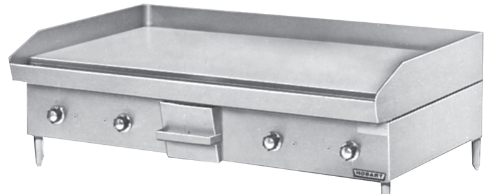
FORM 27410, Rev. B (66-4182-1&2B (6-99)

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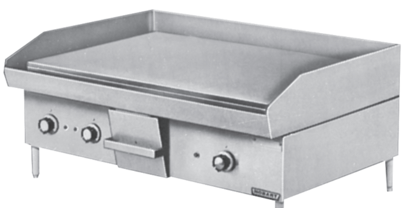
CG SERIES ELECTRIC COUNTER GRIDDLES



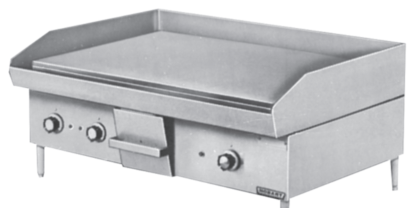
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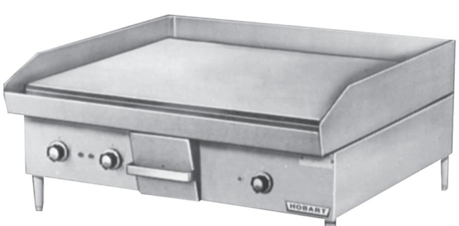
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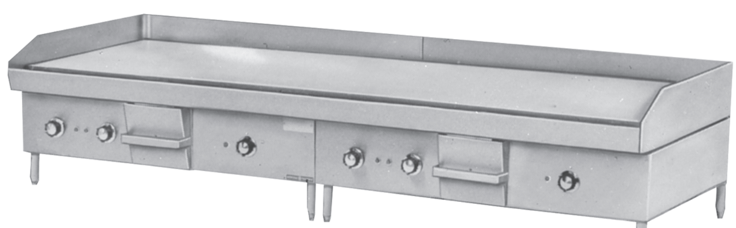
CG50



CG55



CG58



CG59

GENERAL & DIMENSIONAL DATA — TABLE ONE

MODEL	OVERALL BODY DIMENSIONS						GRID SURFACE DIMENSIONS						TYPICAL PRODUCTION								WEIGHTS			
	W		D		H (Less Legs)		W		D		Square Area		Hamburgers (2.5 oz., 3.5" dia.)		Pancakes (4" Dia.)		Min. Steaks (4 oz., 1/2" thick)		Fried Eggs		Ship		Net	
	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	IN.	MM.	Qty/ Load	Qty/ Load	Qty/ Load	Qty/ Load	Qty/ Load	Qty/ Load	Qty/ Load	Qty/ Load	Lb.	Kilos	Lb.	Kilos
CG20	24	610	25.17	639	9.31	237	24	610	18	457	432	2787	32	480+	21	260-320	12	145+	30	450+	165	75	140	64
CG41	48	1219	27.63	702	9.31	237	48	1219	24	610	1140	7355	86	1300+	53	600+	32	400+	86	1200+	275	125	250	113
CG50	60	1524	27.63	702	9.31	237	60	1524	24	610	1440	29640	102	1541	70	792	40	500	108	1500	345	156	320	145
CG55	36	914	21.66	550	9.31	237	36	914	18	457	642	41420	48	720+	32	384-480	18	216+	45	675+	190	86	168	76
CG58	36	914	27.63	702	9.31	237	36	914	24	610	855	55162	65	975+	40	450+	24	300+	65	900+	230	104	207	94
CG59	72	1829	27.63	702	9.31	237	72	1829	24	610	1710	11032	120	2400+	80	900+	48	700+	130	1800+	560	254	445	202

Installation, Operation and Care of
CG SERIES ELECTRIC COUNTER GRIDDLES

SAVE THESE INSTRUCTIONS FOR FUTURE USE

GENERAL

Table 1 shows key general and dimensional data of all models. Consult floor plans on pages 8-10 for positioning and related information. See pages 11-13 for wiring diagrams.

Hobart CG Series Electric Counter Griddles are heavy duty griddles capable of handling any griddling operation with ease. Included are large grease drawers which pull out from the front.

INSTALLATION

Before installing the griddle, verify that the electrical supply agrees with the specifications on the griddle data plate which is located on the top right side of the griddle body.

UNPACKING

Immediately after unpacking the griddle, check for possible shipping damage. If the griddle is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

ASSEMBLY

Place the griddle on its back. Attach the four 4" legs (eight 4" legs on Model CG59) to the body of the griddle by threading the exposed leg stud into the threaded holes located on the underside of the griddle. Tighten each leg so that the top face of the leg is pressed firmly against the body bottom.

LOCATION

Place the griddle in its operating location. Allow adequate space around the griddle for operation and servicing.

LEVELING

Level the griddle front-to-back and side-to-side. Hold the leg with one hand to prevent the leg from loosening from the body and use a wrench to turn the foot to increase or decrease leg height.

INSTALLATION CODES AND STANDARDS

Your Hobart griddle should be installed in accordance with:

In the United States

1. State and local codes.
2. National Electrical Code ANSI/NFPA 70 (latest edition).

In Canada:

1. Local codes.
2. Canadian Electrical Code Part 1 CSA-C22.1 (latest edition).

ELECTRICAL CONNECTIONS

WARNING: ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

WARNING: DISCONNECT ELECTRICAL SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

Standard Electrical Connections

1. Remove the small cover plate on the back of the griddle. This exposes the built-in terminal box and line leads.

2. Select a suitable knockout on the rear or bottom of the terminal box.

3. Connect the line leads to the supply wires (refer to the wiring diagram).

4. Push the excess wire into the terminal box and replace the cover plate.

Close Back Wall, Rigid Conduit Electrical Connections

If the griddle is to be installed close to a back wall and rigid condit is to be used, follow this procedure:

1. Lift front of griddle top only as far as necessary to gain access to the terminal box on the body's inside rear.

2. Prop the griddle top up securely to prevent it from falling down and causing serious hand injury. Do not lift the griddle top too high as the thermostat and griddle terminals may be damaged.

3. Remove the fastener near the bottom of the terminal box and slide the enclosure up to expose knockouts.

4. Connect griddle's line leads to the supply wires, as shown in the applicable wiring diagram. Do not disturb the griddle's wiring.

5. Slide enclosure down and secure it with fastener.

6. Lower the griddle top. Make sure that it is securely in place.

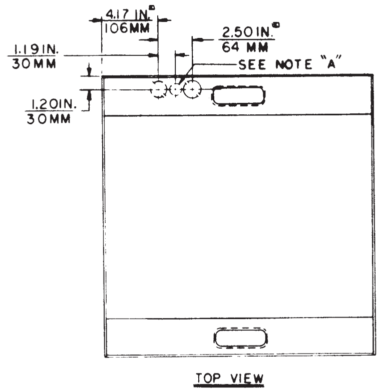
Since the griddle is not fused, you must connect it to a fused circuit equipped with a suitable disconnecting means as required by local authorities.

ELECTRICAL DATA — TABLE TWO

MODEL	TOTAL KW	TEMP. RANGE (°F)	PREHEAT TIME (MIN. TO 350°F)	WATTS TO HOLD 400°F	PHASE-LOADING AND LINE AMPERES																
					3-PHASE LOADING			NOMINAL AMPERES PER LINE													
								3-PHASE									1-PHASE		
					KW PER PHASE			208 VOLTS			240 VOLTS			480 VOLTS			208 V.	240 V.	480 V.
					L1-L2	L2-L3	L1-L3	L1	L2	L3	L1	L2	L3	L1	L2	L3			
CG20	8.0 6.0	200- 450	7	1205	4.0 3.0	0.0 0.0	4.0 3.0	25.0	14.4	14.4	28.9	16.7	16.7	14.4	8.3	8.3	28.8	33.3	16.7
CG41	21.6	200- 450	7	2100	10.8	5.4	5.4	68.7	68.7	45.2	59.5	59.5	39.0	29.8	29.8	19.5	103.9	90.0	45.0
CG50 **CG50 ***	16.2 10.8	200- 400	7	3500	5.4 5.4	5.4 0.0	5.4 5.4	45.0 45.0	45.0 26.0	45.0 26.0	39.0 39.0	39.0 22.5	39.0 22.5	19.5 19.5	19.5 11.3	19.5 11.3	77.9 51.9	67.5 45.0	33.8 22.5
CG55	12.0	200- 450	7	1808	4.0	4.0	4.0	33.4	33.4	33.4	28.9	28.9	28.9	14.4	14.4	14.4	57.7	50.0	25.0
CG58	16.2	200- 450	7	2100	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5	33.8
CG59	32.4 **	200- 450	7	4200	5.4	5.4	5.4	45.0	45.0	45.0	39.0	39.0	39.0	19.5	19.5	19.5	77.9	67.5	33.8

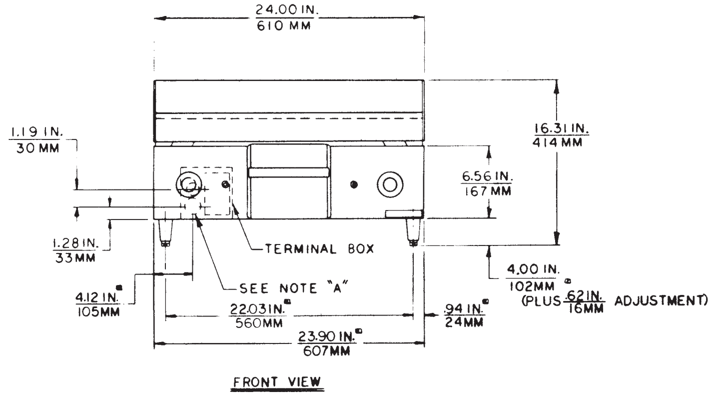
* Two separate conduit connections must be made; one connection carries 16.2 KW and the other carries 10.8 KW.
** Two separate conduit connections must be made; each connection carries one-half of the rated load.

Rated voltages: 208, 240, 480 VAC; 1- or 3-phase, 50/60 Hz.



INSTALLATION RESTRICTIONS:
When installing griddle, side(s) must be 1" from wall(s) and back may be flush with wall.

NOTE "A"
1.09 IN./28 MM, .88 IN/22 MM & 1.38 IN/35MM DIA. KNOCKOUT IN BACK AND BOTTOM FOR CONDUIT ENTRANCE.



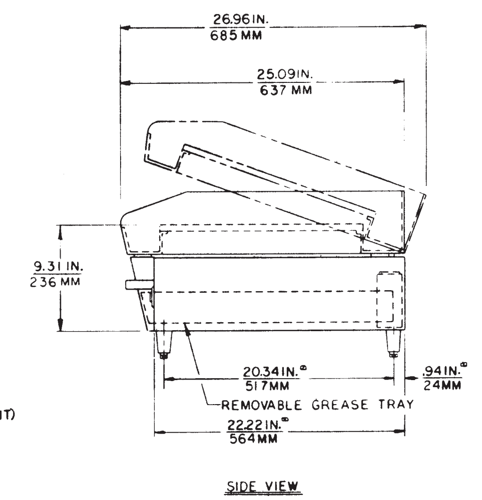
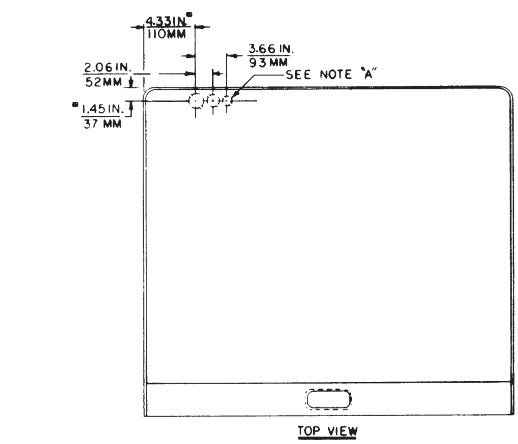
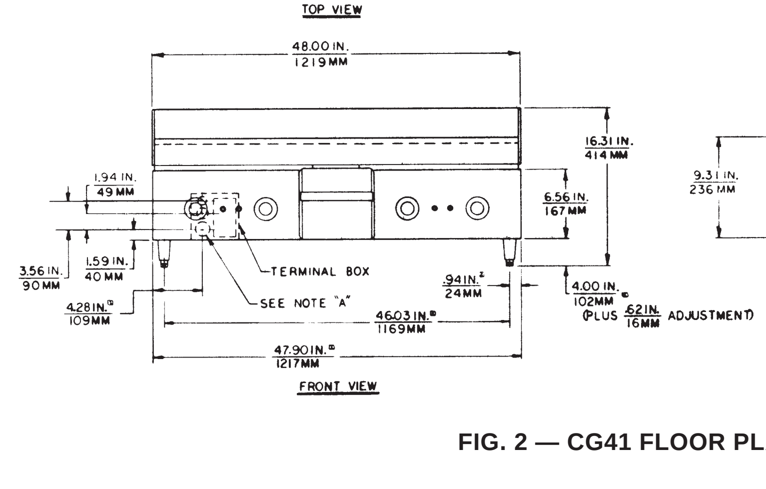


FIG. 1 — CG20 FLOOR PLAN



INSTALLATION RESTRICTIONS:
WHEN INSTALLING GRIDDLE, SIDE(S) MUST BE 1" FROM WALL(S) AND BACK MUST BE 1" FROM WALL.

NOTE "A"
1.09 IN./28MM, 1.38 IN./35MM & 1.75 IN./44 MM DIA. KNOCKOUT IN BACK AND BOTTOM FOR CONDUIT ENTRANCE.



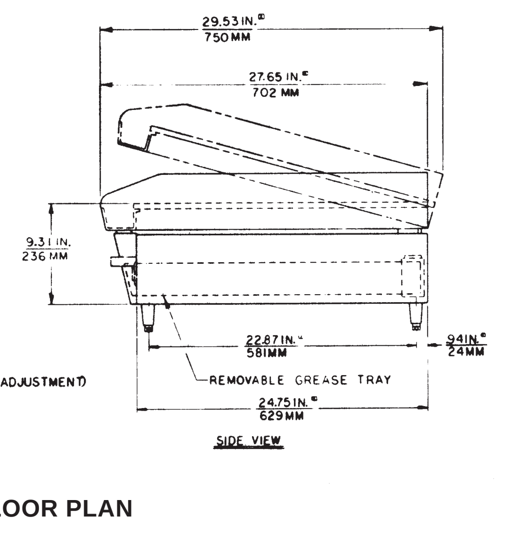
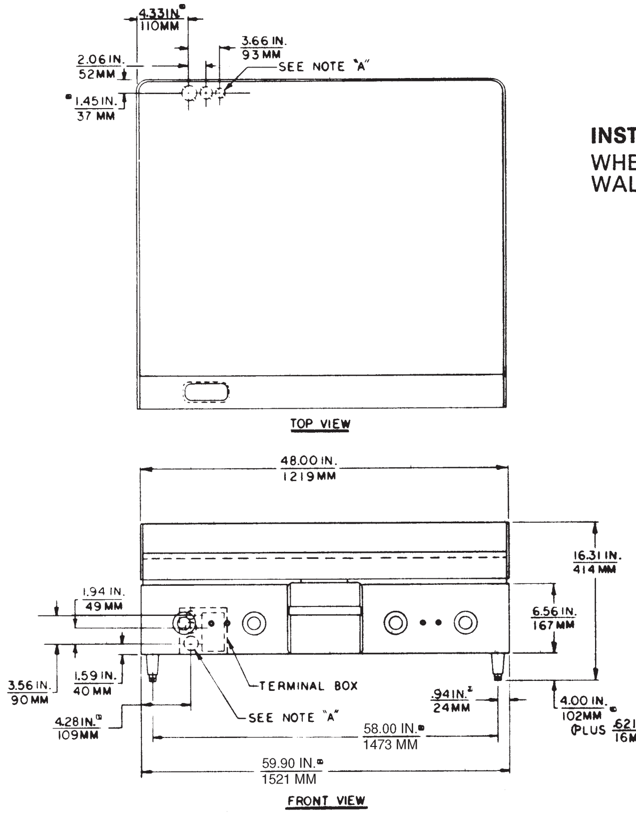


FIG. 2 — CG41 FLOOR PLAN



INSTALLATION RESTRICTIONS:

WHEN INSTALLING GRIDDLE, SIDE(S) MUST BE 1" FROM WALL(S) AND BACK MUST BE 1" FROM WALL.

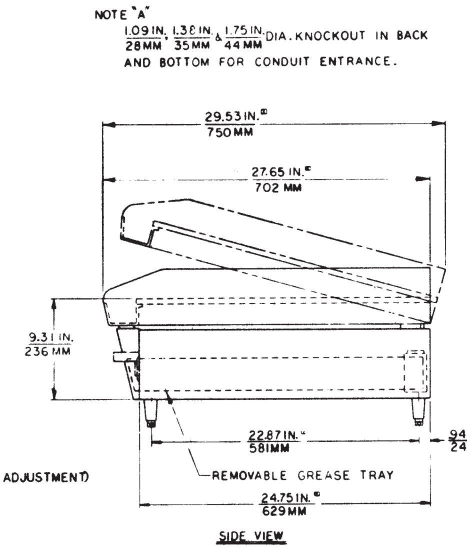
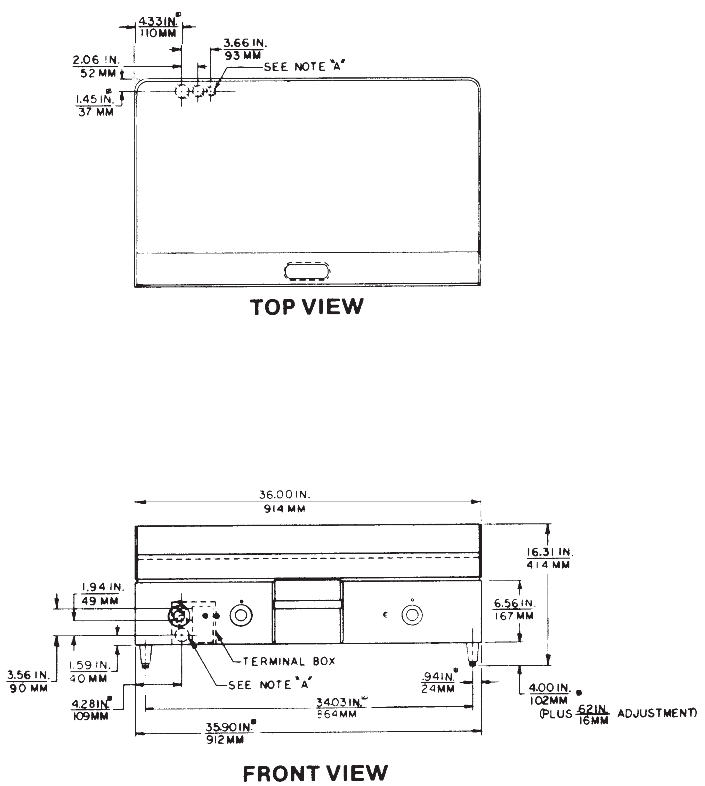


FIG. 3 — CG50 FLOOR PLAN



INSTALLATION RESTRICTIONS:

When installing the **CG55** griddle, the side(s) must be 1" from the wall(s) and the back must be 1" from the wall.

4" legs to be in place for operation. For supply connections use wire suitable for 90C (194F).

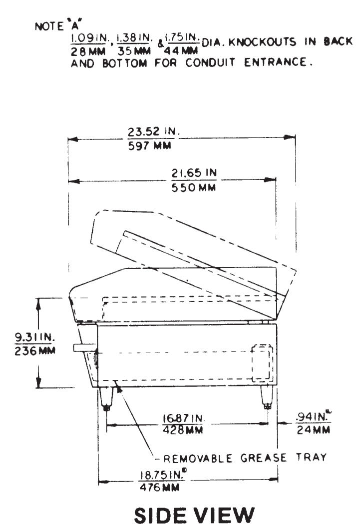
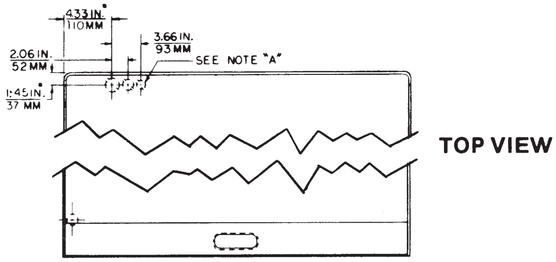
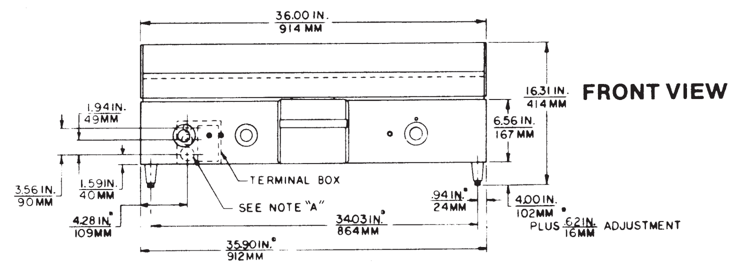
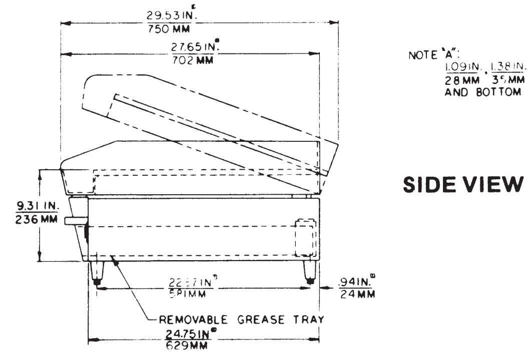


FIG. 4 — CG55 FLOOR PLAN



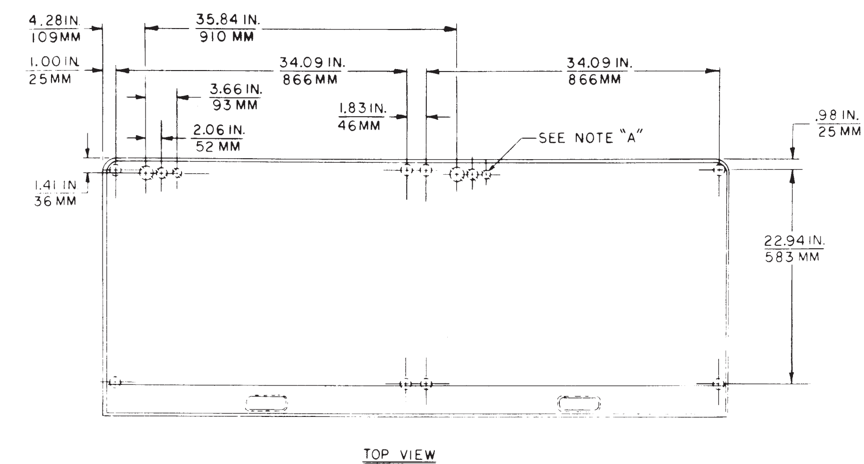
INSTALLATION RESTRICTIONS:
When installing the **CG58** griddle, the side(s) must be 1" from the wall(s) and the back must be 1" from the wall.





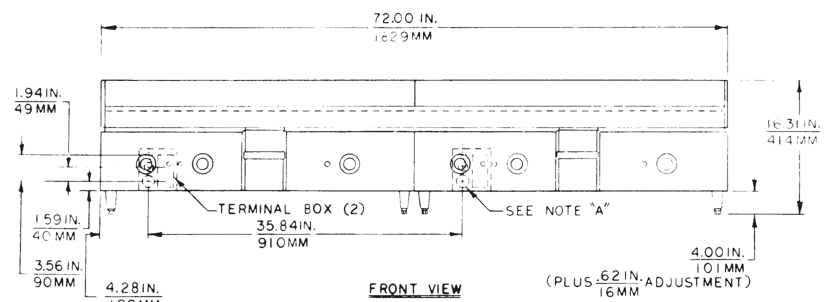
NOTE "A":
1.09 IN./28 MM, 1.38 IN./35 MM & 1.75 IN./44 MM DIA. KNOCKOUTS IN BACK AND BOTTOM FOR CONDUIT ENTRANCE.

FIG. 5 — CG58 FLOOR PLAN



INSTALLATION RESTRICTIONS:
When installing the **CG59** griddle, the side(s) must be 1" from the wall(s) and the back must be 1" from the wall.

NOTE "A"
1.09 IN./28 MM, 1.38 IN./35 MM & 1.75 IN./44 MM DIA. KNOCKOUT IN BACK AND BOTTOM FOR CONDUIT ENTRANCE.



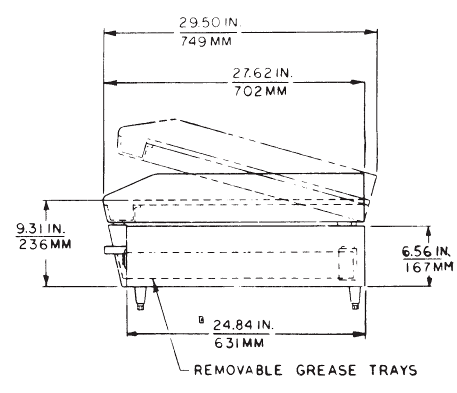


FIG. 6 — CG59 FLOOR PLAN

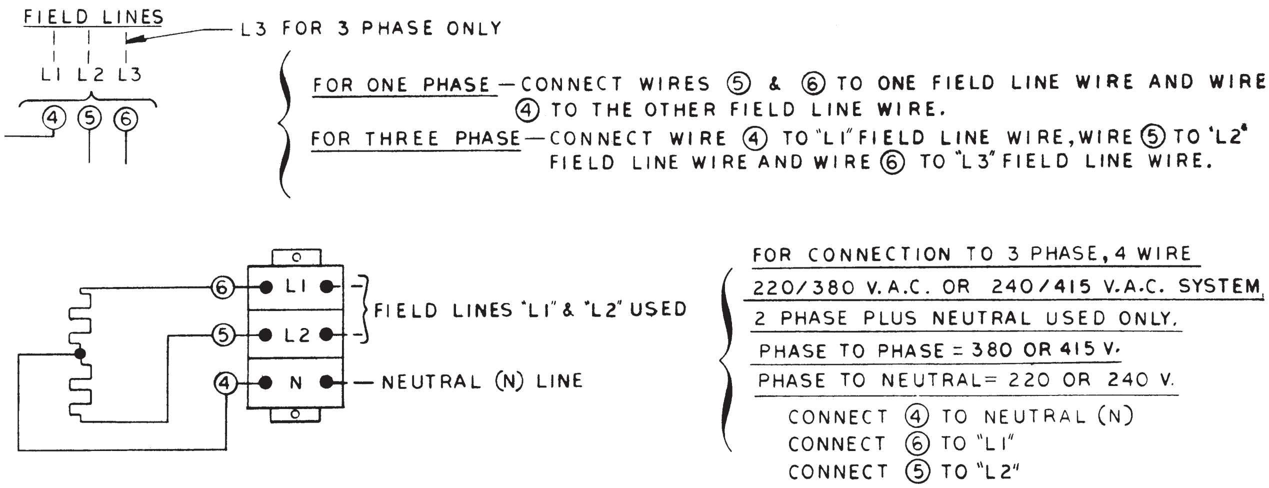


FIG. 7 — CG20 WIRING DIAGRAM - 208, 240 & 480 V., 1 & 3 PHASE

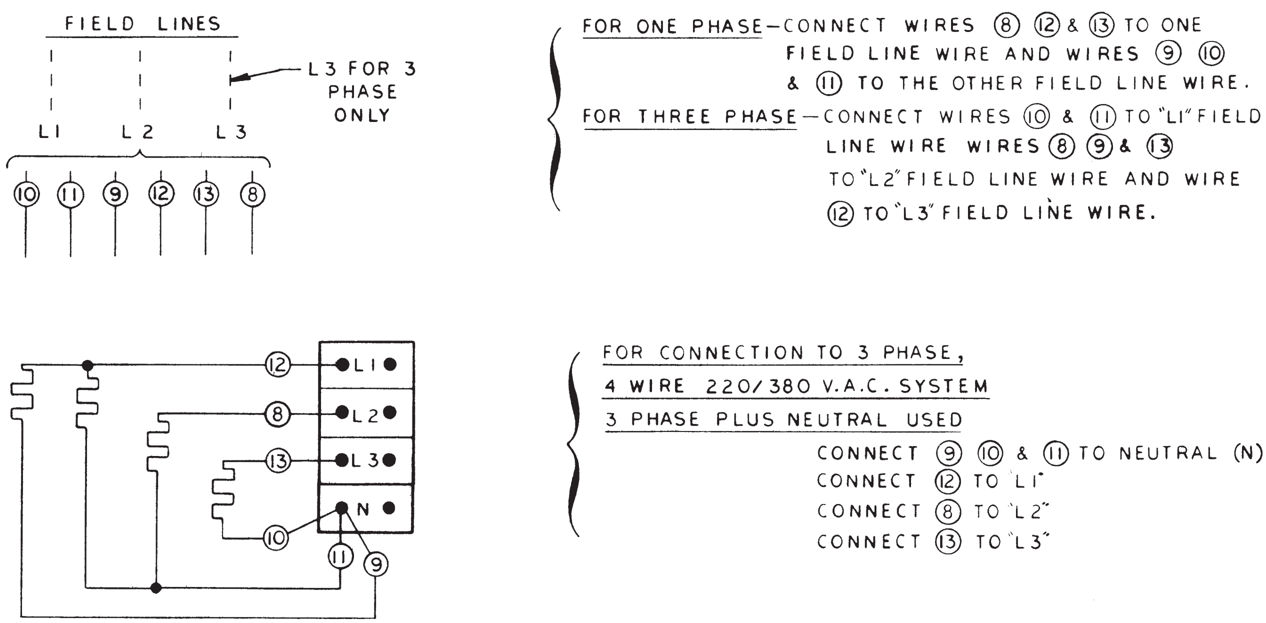


FIG. 8 — CG41 WIRING DIAGRAM - 208/240 & 480 V., 1 & 3 PHASE

FOR SUPPLY CONNECTIONS USE COPPER WIRE SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND SUITABLE FOR AT LEAST 90°C. (194°F.)

LEAD MARKER NUMBERS ARE THE SAME AS LEAD ITEM NUMBERS UNLESS OTHERWISE SPECIFIED.

<u>208/240 V. WIRING TO BE:</u>
10 GA., 532515 - LEADS 1-18
18 GA., 532518 - LEADS 19-24

<u>480 V. WIRING TO BE:</u>
10 GA., 532515 - LEAD 11
12 GA., 532514 - LEADS 8, 10, & 15-18
14 GA., 529358 - LEADS 1-7, 9, & 11-14
18 GA., 532518 - LEADS 19-24

<u>PHASE WIRING</u>
<u>JUNCTION BOX RIGHT BODY</u>
SINGLE PHASE: CONNECT WIRES 10 & 12 TO ONE FIELD LINE WIRE AND WIRES 8 & 17 TO THE OTHER FIELD LINE WIRE.

THREE PHASE: CONNECT WIRES 8 & 10 TO L1 FIELD LINE WIRE, WIRE 17 TO L2 FIELD LINE WIRE AND WIRE 12 TO L3 FIELD LINE WIRE.

<u>JUNCTION BOX LEFT BODY</u>
SINGLE PHASE: CONNECT WIRE 18 TO ONE FIELD LINE WIRE AND WIRES 16 & 15 TO THE OTHER FIELD LINE WIRE.

THREE PHASE: CONNECT WIRE 18 TO L1 FIELD LINE WIRE, WIRE 16 TO L2 FIELD LINE WIRE AND WIRE 15 TO L3 FIELD LINE WIRE.

<u>FOR CONNECTION TO 3-PHASE, 4-WIRE 220 380 V. SYSTEM</u>
<u>2-PHASE PLUG NEUTRAL USED ONLY</u>
CONNECT WIRES 8 & 10 TO NEUTRAL (N)
CONNECT WIRE 12 TO L1
CONNECT WIRE 17 TO L2

CONNECT WIRE 18 TO NEUTRAL (N)
CONNECT WIRE 16 TO L1
CONNECT WIRE 15 TO L2

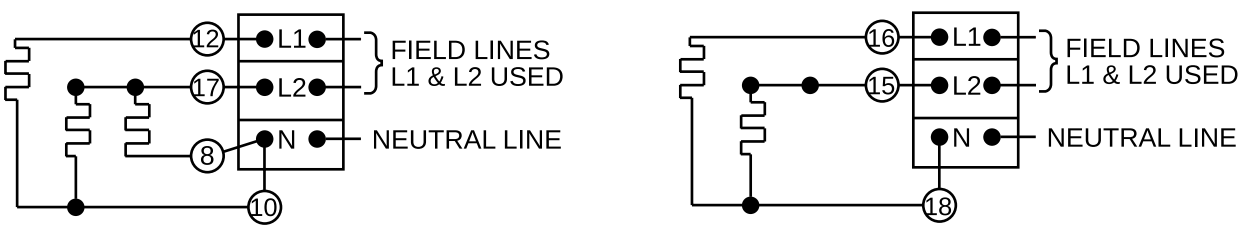


FIG. 9 — CG50 WIRING DIAGRAM - 208, 240 & 480 V., 1 & 3 PHASE

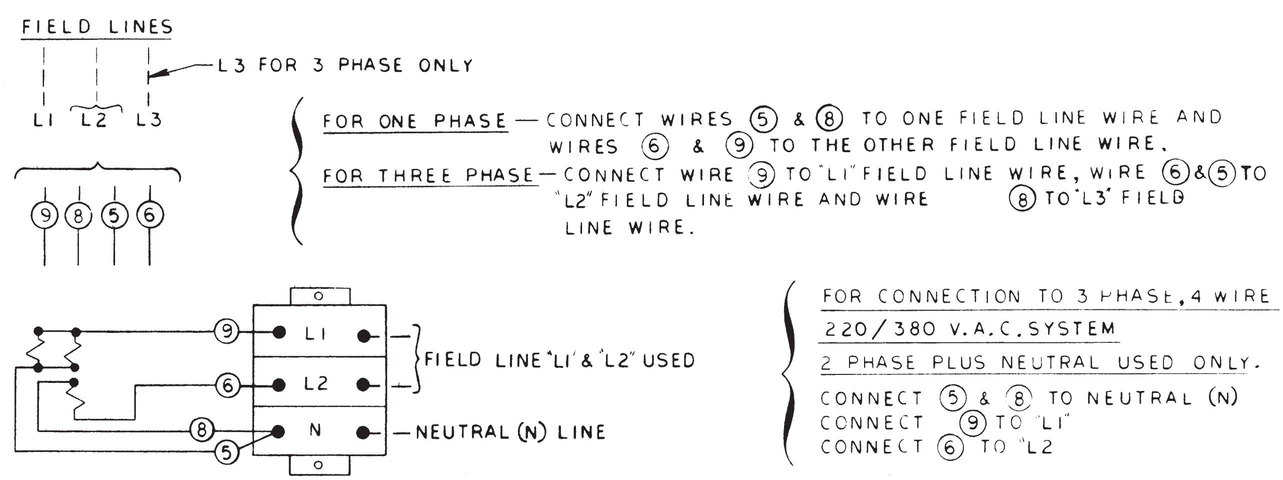


FIG. 10 — CG55 WIRING DIAGRAM - 208, 240 & 480 V., 1 & 3 PHASE

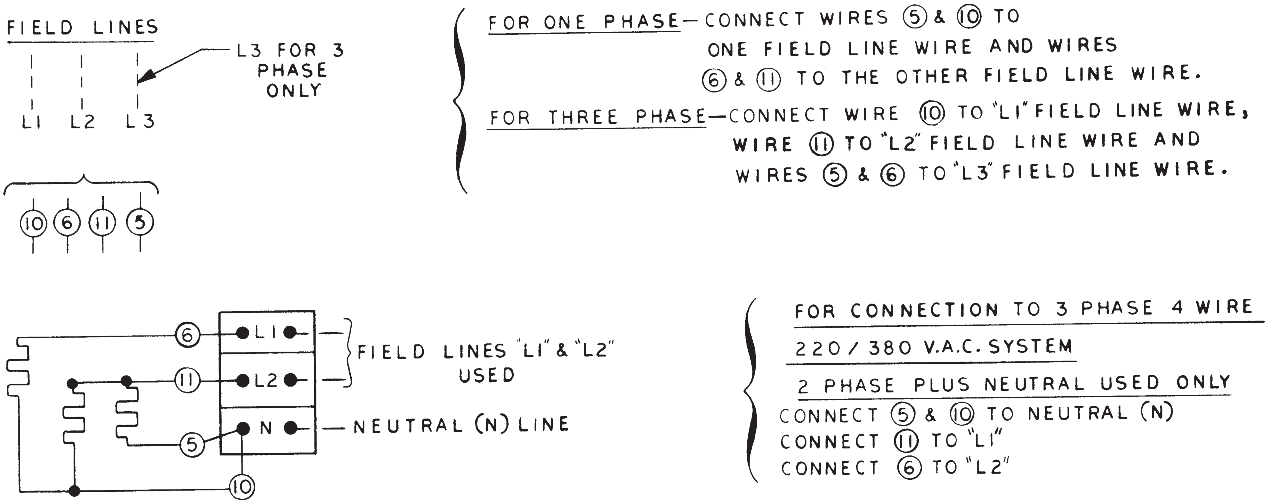


FIG. 11 —CG58 WIRING DIAGRAM - 208, 240 & 480 V., 1 & 3 PHASE

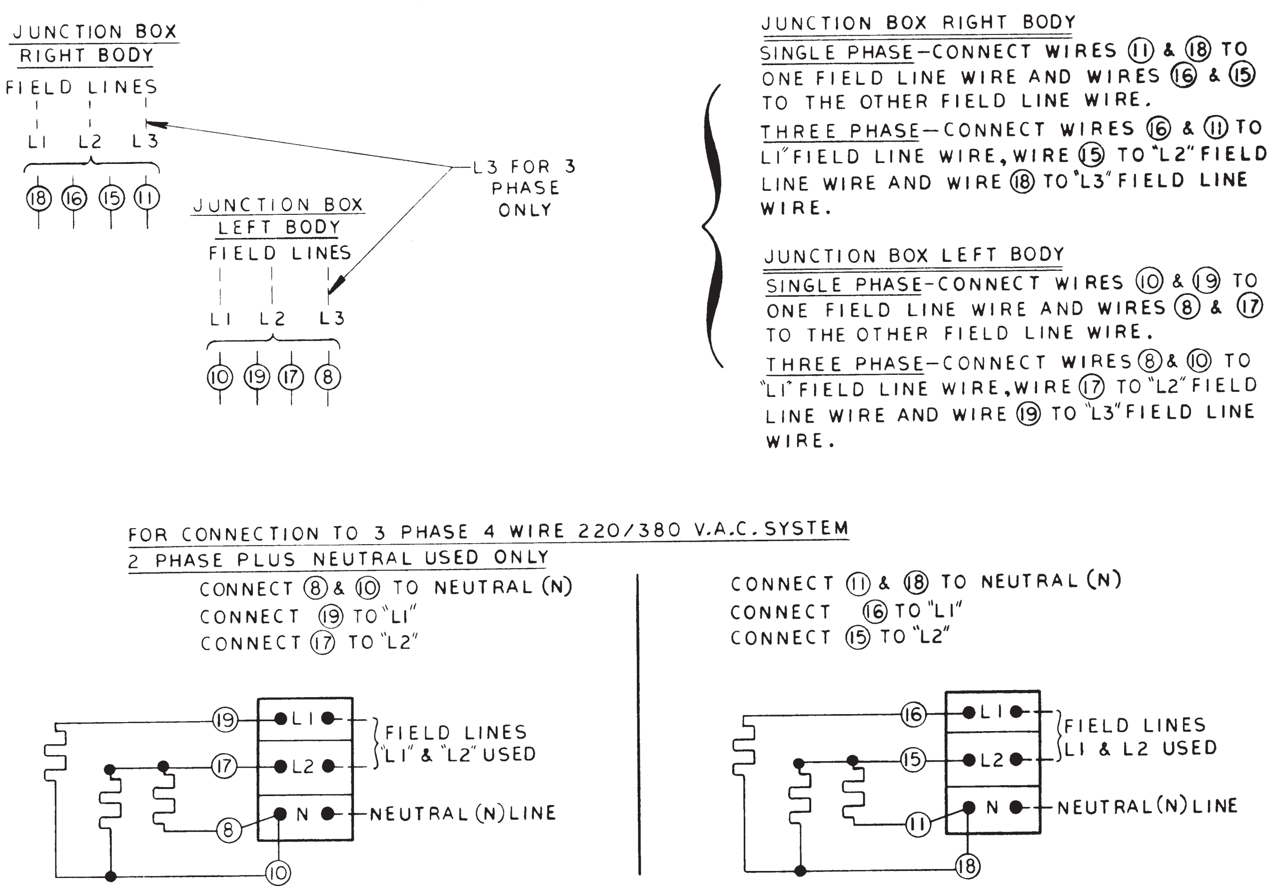


FIG. 12 — CG59 WIRING DIAGRAM - 208, 240 & 480 V., 1 & 3 PHASE

OPERATION

WARNING: THE GRIDDLE AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, CLEANING AND SERVICING THE GRIDDLE.

This griddle plate is steel, but the surface is relatively soft and can be scored or dented by carelessly using a spatula. Be careful not to dent, scratch, or gouge the plate surface. Do not try to knock off loose food that may be on the spatula by tapping the corner or the edge of the spatula on the griddle surface.

CONTROLS

Thermostat: Controls temperature of griddle surface. Each thermostat controls a 12" wide griddle section independently.

Red Indicator Lights: When lit, indicates heating elements are providing heat to that section of the griddle. When off, indicates that particular section has reached set temperature. Flashes on and off during the cooking operation to show that correct temperature is being maintained.

BEFORE FIRST USE

The griddle is shipped with a protective coating of grease. Remove this grease when the griddle plate is being cleaned prior to its first use. Using a mild detergent and hot water, wash the griddle well, Rinse thoroughly with a clean, damp cloth and wipe dry.

The metal surface of the griddle is porous. Food tends to get trapped in these pores and stick; therefore, it is important to "season" or "fill up" these pores with cooking oil before cooking on any metal-surfaced griddle. Seasoning gives the surface a slick, hard finish from which the food will release easily.

To season, heat the griddle to 400°F (when 400°F is reached, the red indicator light goes off). Pour on a small amount of cooking oil (about one ounce per square foot of surface). With a cloth, spread the oil over the entire griddle surface to create a thin film. Wait 2 minutes, then wipe off excess oil. Repeat this operation.

USING THE GRIDDLE

To turn the griddle on, turn the thermostat(s) to the desired setting. To turn the griddle off, turn all thermostats to the OFF position. For extended shutdown, turn all thermostats to the OFF position, and turn off electric supply to the griddle. If the griddle is to be shut down for an extended period, put a heavy coat of grease over the griddle plate to inhibit rusting.

To preheat the griddle, turn the thermostat(s) on 15-20 minutes before cooking. Load the griddle and cook according to the recipe. Turn foods half-way through cooking time unless otherwise specified in the recipe.

CLEANING

After Each Cooking Load: Scrape the griddle surface with a scraper or rigid spatula to remove excess fat and food particles. Take care that the integral splashback is not vigorously banged with the spatula.

Once A Day or When Necessary: Thoroughly clean and wipe out the grease trough around the griddle. As necessary during use, wipe out accumulated material to provide good drainage.

Remove the grease drawer, empty it and wash in the same manner as any ordinary cooking utensil.

Wipe the griddle exterior clean with a damp cloth and dry.

Each Week or When Necessary: Clean the griddle surface thoroughly. If desired, use a pumice or griddle stone over the surface. Rub with the grain of the metal while still warm (not hot). Do not use steel wool because it may damage the surface of the griddle.

After each thorough cleaning, the cooking surface must be reseasoned.

MAINTENANCE

WARNING: THE GRIDDLE AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, CLEANING AND SERVICING THE GRIDDLE.

WARNING: DISCONNECT ELECTRICAL SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE YOU ARE WORKING ON THE CIRCUIT.

All valves and thermostats must be checked and lubricated periodically. Contact your local Hobart Service Agency.

SUGGESTED COOKING GUIDE

These griddle temperatures and cooking times are suggestions only. You may want to try others.

FOOD	TEMP (°F)	TIME (MIN.)
Sandwich Items		
Hamburgers	350	3-4
Cheeseburgers	350	3-4
Cheese Sandwich	375	3-4
Ham Salad Sandwich	375	3-4
Meats		
Frankfurters	325	2-3
Minute Steak - Medium	400	3-4
Club Steaks - Inch thick, Med.	400	3-5
Ham Steaks	375	3-4
Beef Tenderloin	400	3-4
Boiled Ham	375	2
Corned Beef Patties	350	2-3
Bacon	350	2-3
Canadian Bacon	350	2-3
Sausage Links	350	3
Sausage Patties	350	3
Eggs		
Scrambled Eggs	300	1-2
Hard Fried Eggs	300	3
Soft Fried Eggs	300	2
Sunny Side Up Eggs	300	2
Other		
French Toast	350	2-3
Pancakes	375	2
American Fries	375	3-4
Potato Patties	375	3-4

GRIDDLE TROUBLESHOOTING GUIDE

Problem \ Possible Cause	Heat set too high	Moisture in food may be turning into steam	Griddle surface needs cleaning and/or seasoning	Surface under food may not have been covered with enough cooking oil	Food may not have been cooked for long enough time	Food itself may have off-flavor	Food may have been stored improperly before cooking	Too much cooking oil used	Heat set too low
Fat appears to smoke excessively	X	X							
Food sticks to griddle	X		X	X					
Food burned around edges or contains dark specks	X		X	X					
Food undercooked inside	X				X				
Food tastes greasy or has objectionable off-flavor						X	X	X	X
Noticeable build-up of gum on griddle	X		X					X	